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BY E-MAIL

January 10, 2014

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Niagara-on-the-Lake Hydro Inc. ("NOTL Hydro")
2014 Distribution Rate Application
Board Staff Interrogatories
Board File No. EB-2013-0155**

In accordance with Procedural Order #2, please find attached Board Staff's interrogatories in the above noted proceeding. NOTL Hydro and all intervenors have been copied on this filing.

Yours truly,

Original Signed By

Stephen Vetsis
Analyst – Applications & Regulatory Audit

Encl.

Board Staff Interrogatories
2014 Cost of Service Rate Application
Niagara-on-the-Lake Hydro Inc. ("NOTL Hydro")
EB-2013-0155
January 10, 2013

1. Foundation

- ***Issue 1.1:*** *Does the planning (regional, infrastructure investment, asset management etc.) undertaken by the applicant and outlined in the application support the appropriate management of the applicant's assets?*

1.1-Staff-1

Ref: Ex.2/App.2A/pg. 20 and 21

Ref: E -2/T-3/S-2/p.1, Table 2.3.1 - Summary of Capital Expenditures

Ref: Ex.2/App.2A/ pg. 81-84, C. Category-specific requirements for each project/activity/System Renewal for Overhead System and for Underground System

In regard to NOTL's Asset Management Tool, found on page 21 of the first reference, NOTL Hydro states:

In the summer of 2012, it became apparent that a software program would be required to assist us with developing our Asset Management Plan. The software would need to integrate the ACA data to assist with the compilation of our 2013 Capital Expenditure Plan and ultimately, our long-term Capital Expenditure Plan. After a selection process, NOTL Hydro purchased 'Optimizer' [..], which has proven to be invaluable tool. This tool allows NOTL Hydro to factor in public and employee safety, service quality, community/corporate goals, legal implications, regulatory, environmental concerns and financial objectives (investment priorities, risk aversion) and budget allocations. See Attachments 12a and 12b.

Table 2.3.1 Summary of Capital Expenditures, summarizes the investments including System Access, System Renewal, and System Service for the historical period since 2009, the bridge year, and the planned forecast period including the test year.

Table 2.3.1 Summary of Capital Expenditures

CATEGORY	Historical Period (previous plan ¹ & actual)															Forecast Period (planned)				
	2009			2010			2011			2012			2013			2014	2015	2016	2017	2018
	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual ²	Var					
	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000				
System Access		44	--		334	--		246	--		1,850	--		37	--	100	100	100	100	100
System Renewal		1,339	--		721	--		397	--		1,745	--		516	--	970	4,030	1,030	935	1,030
System Service		15	--		23	--		19	--		96	--		238	--	95	55	55	55	55
General Plant		407	--		449	--		397	--		491	--		85	--	120	65	65	160	65
TOTAL EXPENDITURE	-	1,805	--	-	1,527	--	-	1,059	--	-	4,182	--	-	876	--	1,285	4,250	1,250	1,250	1,250
System O&M		\$ 839	--		\$ 745	--		\$ 817	--		\$ 949	--		\$ 522	--	\$ 964	\$ 979	\$ 995	\$1,011	\$ 1,027

In the third reference NOTL included a listing of various projects under System Renewal for both Overhead and Underground Systems.

Please provide further details regarding the "Optimizer" program. Specifically:

- Please summarize the inputs provided to the Optimizer tool including any quantitative or qualitative data that was assessed by NOTL staff for each project.
- Please summarize the range of projects (e.g. all projects in the distributor's 5-year plan) that are provided to the Optimizer tool for determination of the capital budget each year.
- Using a specific example, please explain how a particular overhead and underground infrastructure project would be prioritized or deferred over another.
- Was the Optimizer tool used to forecast capital investments for the years 2015 through 2018? If so, please provide details on how the tool assisted NOTL Hydro in accomplishing that task.
- Please explain how the Optimizer tool factors NOTL Hydro's strategic objectives in determining the capital expenditure plan including how the tool achieves the weightings assigned to each objective, as shown in Exhibit 2, Appendix 2A, Attachment 12b. If applicable, please explain how the strategic objectives are quantified for each capital project?

1.1-Staff-2

In late December 2013, many parts of southern Ontario experienced a significant ice storm.

- Please identify any impacts that the Applicant estimates that the December 2013 ice storm has had or will have on the test year capital and OM&A budget levels (e.g., in terms of infrastructure replacement or maintenance and vegetation management).
- Will the Applicant be updating its Application in light of this event? If so, by when does it intend to file any updated evidence?

- c) Please identify any cost impacts that the December 2013 ice storm has had on capital and OM&A spending in 2013 and 2014 which were recorded in Account 1572, Extraordinary Event Costs.

2. Performance Measures

- **Issue 2.1:** Does the applicant's performance in the areas of: (1) delivering on Board-approved plans from its most recent cost of service decision; (2) reliability performance; (3) service quality, and (4) efficiency benchmarking, support the application?

2.1-Staff-3

Ref: Ex.2/T.3/Sch.5/pg. 1 and 2

Ref: Ex.2/App.2A/pg. 9

Table 2.3.3 and Table 2.3.4 of Ex. 2/T. 3/Sch. 5 show NOTL Hydro's historical reliability and projected reliability indices, respectively. They are reproduced below for reference.

Table 2.3.3 - Service Reliability Statistics			
Year	SAIDI	SAIFI	CAIDI
Including Loss of Supply			
2009	0.33	0.28	1.2
2010	0.06	0.03	1.62
2011	15.39	4.36	3.53
2012	1.54	0.95	1.63
Excluding Loss of Supply			
2009	0.21	0.13	1.58
2010	0.06	0.03	1.62
2011	15.39	4.36	3.53
2012	0.94	0.95	0.99

Table 2.3.4 - Target Indices for 2013 and 2014			
Year	SAIDI	SAIFI	CAIDI
Including Loss of Supply			
2013	0.62	0.40	1.55
2014	0.60	0.39	1.54
Excluding Loss of Supply			
2013	0.40	0.40	1.00
2014	0.38	0.38	1.00

On page 9 of the Consolidated Distribution System Plan ("CDSP"), NOTL Hydro states:

Storms and inclement weather have an adverse impact on outage indices and the frequency of storms can vary year to year. Therefore, complex interpretation of annual results is required. In April 2011, a tornado like windstorm swept through Niagara causing serious damage to our system. Meanwhile, 2010 was referred to as the 'quiet year' when we experienced relatively few weather related outages. With information suggesting that our

MTS#2 transformer units would be approaching the end of their useful life in the next 5-10 years, we moved a significant amount of load off MTS#2 over to the newer MTS#1 station. The MTS#1 M2 Feeder picked up the lion's share of the MTS#2 load and in doing so, doubled the length (and exposure) of this rural feeder. We accept the higher outage indices on the M2 as temporary until 2015 when the MTS#2 transformer unit is placed on line and the M2 can be restored to a normal configuration.

- a) Does NOTL Hydro expect that its reliability indices will return to levels exhibited in 2009 and 2010 when the new MTS#2 transformer unit is installed and in use?
- b) Was the decision to shift the load from the MTS#2 station to the MTS#1 station driven solely by the asset condition assessment of the MTS#2 station? Had NOTL Hydro been experiencing issues with increased outages for customers fed by the MTS#2 station prior to that point?
- c) Please provide NOTL Hydro's best estimate of its outage indices in 2011, excluding the impacts of the windstorm.

4. Operational Effectiveness

- **Issue 4.1:** *Does the applicant's distribution system plan appropriately support continuous improvement in productivity, the attainment of system reliability and quality objectives, and the associated level of revenue requirement requested by the applicant?*

4.1-Staff-4

Ref: Ex.2/App.2A/pg. 4

On page 4 of the CDSP, NOTL Hydro states that "a recent consultant's study suggests that the two transformer units at MTS#2 will approach the end of their useful life in the next 5-10 years and replacement/refurbishment should be addressed."

- a) Please provide a copy of the consultant's study mentioned in the reference above.

4.1-Staff-5

Ref: Ex.2/App.2A/pg. 16

Ref: Ex.2/App.2A/ Attachment 11 - Equipment Failure Analysis

On page 16 of the CDSP, NOTL Hydro states:

On an ongoing basis, each individual outage is recorded and includes time, duration, location/feeder, cause and the need for follow-up (see Attachment 11). This information is summarized by month and year and provides data for our reliability indices as well as our worst performing feeder analysis (Attachment 3). This information is particularly scrutinized during budget time

and factors in to the need to make the necessary improvements to the worst performing feeders. This process is described in more detail under 'Feeder Analysis' on page 9.

At Attachment 11, of the same reference, the 2012 Outage Summary is shown. Under the "Summary of Causes" heading there is reference to "Equipment Failure".

- a) Please indicate whether under "Equipment Failure", NOTL keeps track of the type of equipment that has failed whenever an incident is logged (e.g., "Poles", "Pole Mounted transformers", "Overhead Line Switches", "Pad Mounted Transformers" etc.)? If yes, are the outage and failure information for each type of asset used as input to the Asset Management Process?
- b) If the response to a) above is negative, please indicate whether steps are planned to include such analysis in the Asset Management Process.

4.1-Staff-6

Ref: Ex.2/App.2A/p. 20

Ref: Ex.2/App.2A/p. 18, section 5.3.2 "Overview of Assets Managed", item b)

At the first reference, NOTL in describing its Asset Condition Assessment (ACA) process stated that:

Our ACA process did not involve the recording of specific data such as transformer name plate data and age. This direction was intentional as a means of completing the process more quickly and with the knowledge that the oldest assets (4 kV system and previous Ontario Hydro assets) would be replaced in the next 5-7 years leaving our entire system with assets less than 35 years old.

At the second reference, NOTL indicated that it owned two 115/27.6 kV supply stations with 6 -27.6 kV feeders in total.

- a) Given NOTL's stated intention to convert the 4.16 kV distribution system to the higher voltage 27.6 kV, please indicate whether or not NOTL intends to commence recording, for the existing 27.6 higher voltage distribution system, specific data for each system element covering asset categories such as Overhead Line Switches, Pad Mounted Transformers, Pad Mounted Switchgear, and Underground Cables etc.? If the response is yes, please indicate when it will start to do so. If the response is no, please provide the rationale.
- **Issue 4.2:** *Are the applicant's proposed OM&A expenses clearly driven by appropriate objectives and do they show continuous improvement in cost performance?*

4.2-Staff-7

Ref: Ex.4/T.1/Sch.2/pg. 2, Table 4.1.4

Ref: EB-2012-0036, Draft Rate Order, Smart Meter Model, filed on June 11, 2012

On Table 4.1.4, NOTL Hydro provides a summary of the main drivers for increases to OM&A from the last Board approved rebasing year (2009) to the 2014 test year. The table is reproduced below, for reference.

OM&A	Last Rebasing Year (2009 Actuals)	2010 Actuals	2011 Actuals	2012 Actuals	2013 Bridge Year	2014 Test Year	Combined 2009 to 2014
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP
Opening Balance (2009=Board Approved)	\$ 1,844,140	\$ 1,817,894	\$ 1,769,548	\$ 1,904,187	\$ 2,141,405	\$ 2,180,742	\$ 1,844,140
Driver #1 - IBEW contract rates	\$ -	\$ 22,999	\$ 29,222	\$ 27,007	\$ 33,739	\$ 27,119	\$ 140,085
Driver #2 - Non-labour Inflation (IPI)	\$ -	\$ 12,334	\$ 12,334	\$ 18,976	\$ 15,181	\$ 15,181	\$ 74,006
Driver #3 - LEAP donations	\$ -	\$ -	\$ 3,000	\$ -	\$ 2,500	\$ -	\$ 5,500
Driver #4 - Smart Meters - DVA disposition	\$ -	\$ -	\$ -	\$ 184,671	-\$ 184,671	\$ -	\$ -
Driver #5 - Smart Meters - Meter Reading	\$ -	\$ -	\$ -	\$ 42,269	\$ 21,731	\$ 1,000	\$ 65,000
Driver #6 - Smart Meters - Meter Maintenance	\$ -	\$ -	\$ -	\$ 27,539	\$ 12,361	\$ 800	\$ 40,700
Driver #7 - Smart Meters - UCS Billing services	\$ -	\$ 61,124	\$ 14,554	\$ 2,025	\$ 5,565	\$ 1,280	\$ 84,548
Driver #8 - Distribution System Plan - Teleworks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,800	\$ 11,800
Driver #9 - File Nexus Document Management System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,700	\$ 13,700
Driver #10 - Ontario One Call / Locate Services	\$ -	\$ 1,053	\$ 3,501	\$ 23,235	-\$ 1,081	\$ -	\$ 26,708
All other costs	-\$ 26,246	-\$ 145,856	\$ 72,029	-\$ 88,505	\$ 134,013	-\$ 20,915	-\$ 75,481
Closing Balance	\$ 1,817,894	\$ 1,769,548	\$ 1,904,187	\$ 2,141,405	\$ 2,180,742	\$ 2,230,707	\$ 2,230,707

Included in the table are 3 items related to the ongoing operation and maintenance of smart meters: i) Meter Reading, ii) Meter Maintenance and iii) UCS Billing Services.

Sheet 5 "SM_Rev_Req" from the Smart Meter Model, filed with NOTL Hydro's Draft Rate Order for its Smart Meter Cost Recovery Application (EB-2012-0036), indicates \$39,667 in incremental OM&A expenses related to smart meters in NOTL Hydro's service territory.

In its Smart Meter cost recovery application, NOTL Hydro had received approval to recover approximately \$40k in incremental operating expenses for smart meters as part of its Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR). The combined increase in OM&A related to smart meters requested from NOTL Hydro's last rebasing year to the 2014 test year is \$190,248.

- Please explain why the proposed increase in OM&A expenses related to smart meters is significantly higher than the estimated incremental OM&A approved for recovery in the SMIRR in NOTL Hydro's Smart Meter cost recovery application.
- Please comment on whether or not the proposed OM&A expenditures for the 2014 test year are reflective of any efficiencies/savings achieved with respect to meter reading costs.

4.2-Staff-8

Ref: Ex.4/T.2/Sch.1/pg. 6 and 8

On page 6 of Ex.4/T.2/Sch.1, NOTL Hydro states:

Increase in engineering staff time allocated to meters operation and maintenance from the 2009 estimate of 284 hours in the 2009 rebasing to the

current ongoing level of staff time, forecast at 660 hours for 2014, combined with pay-rate increases since 2009.

On page 8, NOTL states:

Increase in staff time allocated to billing from the 2009 estimate of 1,882 hours in the 2009 rebasing to the current ongoing level of staff time, forecast at 3,599 hours for 2014, combined with pay-rate increases since 2009.

The combined increase in OM&A since NOTL Hydro last rebased for the two activities mentioned above is \$114,921 from the 2014 test year.

- a) Please provide further explanation for the significant increases in staff time allocated to meter operation and maintenance, as well as billing.
- b) Please comment on whether or not NOTL Hydro expects the increases in staff time allocated to meter operation and maintenance and billing to maintain throughout the IRM term. Additionally, please comment on any measures NOTL Hydro is taking to reduce the amount of time spent on these activities in the future.

4.2-Staff-9

- a) Please identify the percentage of customers on e-billing as of December 31, 2013.
 - b) Please describe the Applicant's efforts to promote e-billing to its customers.
 - a) Please confirm whether or not NOTL Hydro has moved to monthly billing. If so:
 - i. Please describe other initiatives that the Applicant has undertaken, or intends to undertake, to manage the costs of monthly billing for all customers.
 - ii. As part of the decision making process, has the applicant determined the impact of the change to monthly billing on its working capital? If so, how is the working capital impacted by this change? If not, why not?
- **Issue 4.3:** *Are the applicant's proposed operating and capital expenditures appropriately paced and prioritized to result in reasonable rate increases for customers, or is any additional rate mitigation required?*

4.3-Staff-10

Ref: Ex.2/App.2A/pg. 9

On page 9 of the CDSP, NOTL Hydro states that "with information suggesting that our MTS#2 transformer units would be approaching the end of their useful life in the next 5-10 years, we moved a significant amount of load off MTS#2 over to the newer MTS#1 station."

NOTL Hydro then states "as a means of extending the useful life of the MTS#2 transformer units, we offloaded a majority of the F1 feeder on to the MTS#1 M2 feeder in early 2012. As we fully expect to upgrade one MTS#2 unit in 2015, the normal M2/F1 configuration will be restored."

- a) Given that the expected remaining useful life of the MTS#2 station is 5-10 years and that NOTL Hydro has taken measures to rebalance loads between transformer stations in order to increase the useful life of the MTS#2 station, please explain why NOTL Hydro believes it is necessary to perform the replacement of the MTS#2 station as early as 2015.

4.3-Staff-11

Ref: Ex.8/T.1/Sch.2/pg. 1

Ref: Ex.8/T.1/Sch.8/pg. 5

The bill impact calculation, on page 5 of Ex. 8/T. 1/Sch. 8, indicates a \$4.48 (or 30.37%) increase in the total bill for the Street Lighting class. On page 1 of Ex. 8/T. 1/Sch. 2, NOTL Hydro states:

It is NOTL Hydro's understanding that in order to address the significant under recovery of cost in this class, a significant change to the revenue-to-cost ratio has occurred in many other cases and the bill impacts for these classes have been higher than 10%. Based on the aforementioned information, it is NOTL Hydro's understanding that in the past the Board has not been concerned with bill impacts greater than 10% for Street Lighting and as a result a mitigation plan was not developed.

- a) Has NOTL Hydro contacted its Street Lighting customer(s) to get feedback on the proposed bill increase? If so, please summarize the customer(s)' comments.
- b) NOTL Hydro's current proposed Revenue-to-Cost ratio adjustments would bring the Street Lighting class from a ratio of 57.9% to 90.3%. If NOTL Hydro's Street Lighting customer(s) have posed any objections to the proposed bill impacts or have not been approached about the proposed bill impacts, please provide the estimated bill impacts for the Street Lighting class if NOTL Hydro were to use a phased adjustment to the revenue-to-cost ratios for the Street Lighting class under the following scenarios:
 - i. A 2-year phase-in period (74.1% in 2014 and 90.3% in 2015).
 - ii. A 3-year phase-in period (68.7% in 2015, 79.5% in 2015 and 90.3% in 2016).

5. Public Policy Responsiveness

- **Issue 5.1:** *Do the applicant's proposals meet the obligations mandated by government in areas such as renewable energy and smart meters and any other government mandated obligations?*

5.1-Staff-12

Ref: Ex.2/App.2A/pg. 45 and 46

Ref: Ex.2/App.2A/ pg. 84

Ref: Ex.2/App.2A/Attachment 6 – Customer Engagement Survey

In the first reference on page 46, first paragraph- item c), NOTL Hydro states:

[...] A Town bilaw prohibits the installation of new overhead plant as a means of preserving the original ambiance of the historic town and we have accepted that burial of facilities is in the best interest of the community. The design and project management of the project will be handled by our Engineering Department while construction will be completed by contracted services during the calendar year of 2014. [emphasis added]

In the second reference, it is stated in part that:

[..] A long standing Town by-law requires that new infrastructure in the urban limits of the Old Town be installed underground. NOTL Hydro agrees with the principle of the by-law and has readily complied with the by-law since 1987. The replacement of the aging legacy 4 kV distribution network with 27.6 kV has continued for the past 25 years and is reflected in our 5 year Capex plan. With the completion of the Simcoe 600 amp feeder in 2013 and decommissioning of the last 4 kV sub-station this autumn, the renewal plan for the urban limits has become clear. We estimate that the entire historic Old Town will be converted to 27.6 kV and buried within 15 years.

- a) Please provide a copy of the town by-law mentioned in the first reference.
- b) In making the decision to convert the distribution infrastructure in Old Town from overhead to underground, did NOTL Hydro consider that the Board, under section 78 of the Ontario Energy Board Act, in reviewing and approving an application by an electricity distributor for the purpose of setting just and reasonable rates, is not restricted by any by-law if the Board determines that such a by-law is not in the best interest of the distributors' rate payers.
- c) Please confirm that replacement of the existing 4 kV system with a 27.6 kV overhead system is merely a replacement of existing infrastructure with a more efficient infrastructure and that the replacement is not a new installation as referred to in item c) of the first reference.
- d) Did NOTL compare the cost of a 27.6 kV overhead system with the cost of a 27.6 kV underground system? If the answer is yes, please provide any and all documents which set out the cost comparison including all assumptions and sources of the cost estimates, as well as, installation costs and the expected annual OM&A.

- e) If the answer to d) above is “no” please explain why no comparison of the costs of an overhead vs. underground line was completed.
- f) Did NOTL investigate the use of an overhead design for the 27.6 kV option such as a “Hendrix Cable System” which utilizes an overhead configuration with reduced dimensions and overhead attachment techniques but with conductors insulated to a degree that significantly reduces outages from tree branch and animal/bird contact and also reduces weather related outages? If not, why not?
- g) Please indicate whether NOTL received any feedback from its customers regarding NOTL’s 10 year plan to convert the old 4 kV overhead system to an underground 27.6 kV system. If so, did NOTL Hydro outline the cost comparison and advantages and disadvantages of the two options?

5.1-Staff-13

Ref: Ex.1/T.1/Sch.2/pg. 10

Ref: Ex.9/T.2/Sch.1/pg. 18 and 19

Ref: Filing Requirements: Distribution System Plans – Filing Under Deemed Conditions of Licence, March 25, 2010, Revised May 17, 2012 (EB-2009-0397)

At the first reference, it is stated that:

NOTL Hydro is requesting approval to include \$237,952 as a 2013 capital addition to be included in the 2014 rate base, resulting from smart grid demonstration project capital costs incurred in 2009, 2010 and 2011 and recorded in Account 1534.

At the second reference, NOTL stated in part that:

The Old Town area of Niagara-on-the-Lake is currently supplied via two 27.6 kV feeders that originate several kilometres south at MTS#2. The feeders have always been susceptible to animal contacts and lightning etc. as they pass through a predominantly rural area. In order to minimize the impact of these outages on the Old Town, NOTL Hydro turned to a Smart Grid solution. Smart switches were installed that effectively transfer the Old Town supply to the alternative feeder in seconds when automatically determined that the fault is not present in the Old Town. The switches are integrated to our SCADA system to provide intelligence and load information. The system has performed flawlessly since placed in operation in 2011. The success prompted Hydro Quebec to invite our Operations Manager to speak at a Regional conference in 2011.

The third reference at pages 20 and 22 describes eligible smart grid activities, namely, Smart Grid Demonstration Projects, Smart Grid Studies and Planning Exercises, and Smart Grid Education and Training.

- a) Please comment on the view that installation of switches to transfer Old Town supply to another feeder to address reliability issues is not new and is part of the ongoing responsibility of any distributor to investigate and address such

issues, and that any capital investment in that regard is part of its normal activities, and does not meet the Filing requirement criteria as prescribed in the noted third reference.

5.1-Staff-14

Ref: E-9/T-2/S-1/pp. 20 – 21/1535 Smart Grid OM&A Deferral Account

Ref: Filing Requirements: Distribution System Plans – Filing Under Deemed Conditions of Licence, March 25, 2010, Revised May 17, 2012 (EB-2009-0397)

In the first reference, NOTL Hydro refers to the following Primary projects contributing to the Smart Grid OM&A account:

- \$ 46,000 : unfunded portion of the Residential Load Control Pilot project This refers to the 2010/2011 Pilot Program partially funded by the OPA;
- Industry smart grid training courses;
- Maintaining/tuning the Smart Grid self-healing system; and
- Participating in an EDA delegation that visited Denmark to study smart grid connection of renewable generation.

In that same first reference NOTL stated in part that:

NOTL Hydro's audited balance in this account at December 31, 2012, including principal and interest to that date, is \$86,258, reflecting OM&A expenses incurred in the years 2009 to 2012. As stated above with regard to Account 1534, NOTL Hydro had not yet recorded the depreciation and accumulated depreciation to December 2012 prior to the 2012 audit¹. The resulting principal balance after adjustments in Account #1535 for expenses up to December 31, 2012 including depreciation is \$130,500.

For 2014, NOTL Hydro is requesting disposition of the December 31, 2012 adjusted balance plus the forecasted interest through April 30, 2014. The claim is a debit balance of \$133,025.

- a) If the Board does not approve NOTL's request of adding \$237,952 as a 2013 capital addition to be included in the 2014 rate base, as outlined earlier in the Board staff interrogatory in regard to "1534 Smart Grid Capital Deferral Account", please confirm that only the \$86,258 would be eligible for consideration in regard to the 1535 Smart Grid OM&A Deferral Account.

¹ In footnote 31(in the above referenced evidence) it is stated that: "These depreciation and accumulated depreciation amounts (total debits and credits respectively of \$44,242) have now been recorded in NOTL Hydro's financial system in account #s 1534 and 1535 respectively in June 2013 "

5.1-Staff-15

Ref: Ex.9/T.2/Sch.1/pg. 15 - 17

On pages 15-17 of Ex.9/T.2/Sch.1, NOTL Hydro outlines its claim for the recovery of start-up OM&A costs related to enabling the connection of renewable generation under Ontario Regulation 330/09.

On page 15, NOTL Hydro states:

\$12,572 for consulting costs. NOTL Hydro along with nine local distribution companies in the Niagara-Erie Region ("NEPA") jointly employed a consultant to prepare a Green Energy Act (GEA) Roadmap. The GEA Roadmap was critical for the NEPA members to understand the legislation and to participate and support the Minister's objectives outlined in the GEA. The Act focussed not only on renewable energy initiatives, but also on opportunities for Demand Response programs, impacts of building codes, updates to smart grid and smart appliance regulations and also impacted plans for the future expansion of LDC transmission and distribution infrastructure. The GEA Roadmap outlined potential opportunities for NEPA to pool resources to potentially launch innovative new projects. NOTL Hydro's share of the Report cost was \$12,000 plus out-of-pockets costs of \$572.

- a) Please explain why NOTL Hydro believes that the cost of the GEA Roadmap report is appropriate for recovery under Ontario Regulation 330/09 given the description above.
- b) If the Board does not approve the recovery of the \$12,572 in consulting costs, please confirm that the total claim under Ontario Regulation 330/09 would be the \$6,000 in costs for an electrical engineer to complete a CIA and commission three (3) new FIT customers.
- c) As the requested recovery under Ontario Regulation 330/09 is for start-up OM&A only, please confirm that NOTL Hydro will apply in its 2015 rate application to update the amount for recovery from the IESO to \$nil.

5.1-Staff-16

Ref: CDSP/Attachment 17-OPA letter/pg. 2/2nd last paragraph

Ref: CDSP/p. 37/1st paragraph

Ref: Report of the Board- Framework for Determining the Direct Benefits Accruing to Consumers of a Distributor under Ontario Regulation 330/09 – June 10, 2010 (EB-2009-0349)/Section 1.1/p. 3

At the first reference, the OPA letter states in part that:

In fact, NOTL Hydro has not identified any renewable generation enabling capital expansion expenditures, although its 5 year capital expenditure program has planned renewable generation enabling expenditures for the

continued development of an outage management system and various smart grid-related technological components.

At the second reference, the evidence provides under “System Service”, a description for 2014 investment of \$95,000 for Capex project titled “System Integration GIS/FIS/CIS/ODS”, and states in part that:

Not long after implementing our AMI network, we realized the vast potential of the system. Integrated data from our AMI, ODS, CIS, FIS and GIS systems can be utilized to develop an outage management system and various other tools to improve our efficiency and customer service. Integration of these systems commenced in 2012 and is proposed to be largely complete in 2014. Utilizing the GIS as a central data base, customer information from the CIS, asset information from the AM system and FIS as well as AMI load information from our ODS system will be integrated. An outage management system is our final outcome and is currently well under development. [...] We are confident based on development to date, that the desired project will be completed. Our 2013 forecasted Capex expense is \$100,000 but we have budgeted \$95,000 in 2014 with the expectation that the project will be completely functional before year end. Funding for this project will be from general revenues. [emphasis added]

The third reference is the Report of the Board outlining the framework for determining the direct benefits accruing to customers of a distributor under Ontario Regulation 330/09.

- a) Please comment whether or not Renewable Generation would benefit from the proposed outage management system as described in the second reference? If yes please describe in detail how Renewable Generation would benefit from this system.
- b) If indeed there are benefits to the Renewable Energy in the NOTL system, how would that share of the benefit be allocated between NOTL’s load customers and NOTL’s Renewable Generator customers?

5.1-Staff-17

Ref: Ex.9/T.3/Sch.3/pg. 2

On page 2 of Ex.9/T.3/Sch.3, NOTL Hydro states that the “allocated weighting (%) of the stranded meter costs was based on the relative proportions of the residential and GS < 50 kW weighted meter capital cost allocations in NOTL Hydro’s 2009 rate application, which used the 2006 cost allocation model.”

- a) What were the installation costs for each of the meter types of the removed stranded meters?
- b) How many meters of each type were removed from service?

- c) Using the responses to a) and b) please provide an allocation of the remaining net book value of stranded meter costs for each class using a weighted average of the installation costs for the associated meters. Please provide updated calculations of the Stranded Meter Rate Rider using this allocation.

7. Revenue Requirement

- **Issue 7.7:** *Has the proposed revenue requirement been accurately determined from the operating, depreciation and tax (PILs) expenses and return on capital, less other revenues?*

7.7-Staff-18

Upon completing all interrogatories from Board staff and intervenors, please provide an updated RRWF with any corrections or adjustments that the applicant wishes to make to the amounts in the previous version of the RRWF included in the middle column. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note.

7.7-Staff-19

Upon completing all interrogatories from Board staff and intervenors, please provide an updated Appendix 2-W for all classes at the typical consumption / demand levels (i.e. 800 kWh for residential, 2,000 kWh for GS<50).

8. Load Forecast, Cost Allocation and Rate Design

- **Issue 8.1:** *Is the proposed load forecast, including billing determinants an appropriate reflection of the energy and demand requirements of the applicant?*

8.1-Staff-20

Ref: Ex.3/T.1/Sch.1/pg. 1

On page 1 of Ex. 3/T. 1/Sch. 1, NOTL Hydro states that it "found that the available data on numbers of customers [and] monthly billed/accrued revenue data by rate class would not support a reliable regression modelling process for rate class load forecasts."

- a) Please provide further details regarding the approaches undertaken by NOTL Hydro to complete class-specific load forecasts. Please include descriptions of the variables used and why they were rejected.
- b) Where available, please provide the results of the regressions that were ultimately rejected including descriptions for the variables that were used.

8.1-Staff-21

Ref: Ex.3/T.2/Sch.1/pg. 16

On page 16 of Ex. 1/T. 2/Sch. 1, NOTL Hydro states:

For the Residential and General Service < 50 kW classes, it has been assumed in previous cost of service rate applications that these two classes are 100% weather sensitive. Intervenors expressed concern with this assumption and have suggested that 100% weather sensitivity is not appropriate. NOTL Hydro agrees with this position but also submits that the weather sensitivity for the Residential and GS < 50 kW classes should be higher than the GS > 50 kW class. As a result, NOTL Hydro has assumed the weather sensitivity for the Residential and General Service < 50 kW classes to be mid-way between 100% and 76.4%, i.e. 88.2%.

- a) Did NOTL Hydro consider any other methods of estimating the weather sensitivity of the Residential and General Service < 50 kW classes? If so, please describe what methods were investigated and why they were not used. If not, please explain why NOTL Hydro feels the proposed approach is reasonable.

- **Issue 8.2:** *Is the proposed cost allocation methodology including the revenue-to-cost ratios appropriate?*

8.2-Staff-22

Ref: Ex.7/T.1/Sch.1/pg. 4, Table 7.1.2

On Table 7.1.2, NOTL Hydro indicates the weighting factors for each of the 30 cost components it identifies as being related to billing and collection.

- a) Please provide descriptions for the activities/functions that comprise the labels in Table 7.1.2 noted below. Where the weighting factors differ between classes for an identified function/activity, please explain the rationale for the difference.
- i. B&C Customer Billing - Systems stuff
 - ii. B&C Collecting – Truck

8.2-Staff-23

Ref: Ex.7/T.1/Sch.1/pg. 6, Table 7.1.6

On Table 7.1.6, NOTL Hydro provides the weights for meter reads for each class. NOTL Hydro indicates a weighting of 50.51 for interval metered customers in the GS > 50 kW class.

- a) Please provide further details as to how the weighting factor for interval metered customers in the GS > 50 kW class was derived and what factors contribute to the weighting factor that is indicated.

- **Issue 8.3:** *Is the proposed rate design including the class-specific fixed and variable splits and any applicant-specific rate classes appropriate?*

8.3-Staff-24

Ref: Ex.8/T.1/Sch.1/pg. 3

Ref: Ex.3/T.2/Sch.1/pg. 23

The customer/connection numbers from NOTL Hydro's load forecast, shown on pg. 23 of Ex.3/T.2/Sch.1/pg.23, do not match the values that are used to calculate the proposed fixed charges on Table 8.1.4 of Ex.8/T.1/Sch.1.

- a) Please explain why NOTL Hydro is using values for customers/connections that do not match the values shown in the adjusted load forecast.
 - b) If any changes are required, please provide updated calculations for the proposed fixed charges for each class.
- **Issue 8.5:** *Is the proposed forecast of other regulated rates and charges including the proposed Retail Transmission Service Rates appropriate?*

8.5-Staff-25

Ref: RTSR Workform – Sheet 6

On Sheet 6 of the RTSR Workform, NOTL Hydro has not provided any billed quantities for Transformation Connection charges.

- a) Please confirm that NOTL Hydro does not pay Transformation Connection charges.

9. Accounting

- **Issue 9.1:** *Are the proposed deferral accounts, both new and existing, account balances, allocation methodology, disposition periods and related rate riders appropriate?*

9.1-Staff-26

Ref: Ex.9/T.2/Sch.1/page 1, Table 9.2.1 and page 10

The evidence with respect to the claim for account 1508 – Sub-account Financial Assistance Payment and Recovery Variance – Ontario Clean Energy Benefit Act is not consistent in the evidence referenced above. Table 9.2.1 on page 1 shows that the amount requested for disposition is \$144, but page 10 of the evidence shows that the claim is a debit balance of \$170,381.

- a) Please clarify and confirm the amount requested for disposition in this proceeding.

- b) If NOTL Hydro is requesting disposition of the \$170,381 debit balance, please reconcile this balance to NOTL Hydro's RRR filing and explain any variances. Please file an updated version of the 2014 Deferral/Variance Account Workform including updated deferral and variance account rate rider calculations.

9.1-Staff-27

Ref: Appendix 2-EE

Board staff notes that the NOTL filed the evidence regarding Account 1576 in September 2013, which includes the forecast figures for Account 1576 in Appendix 2-EE.

- a) Please update 2013 forecast figures based on actual figures, if possible, for Account 1576 and provide the reasons of the update (i.e. adjustments identified, audited by external auditor, etc.).

9.1-Staff-28

Ref: Ex.9/T.2/Sch.1/pg. 28, Table 9.2.8 – 2011 and 2012 Expected Savings for LRAM

NOTL Hydro has requested the disposition of its LRAMVA – Account 1568, of a total amount of \$27,662, which includes \$726 in carrying charges through April 30, 2014. NOTL Hydro is requesting the disposition of the lost revenues related to its 2011 CDM savings in both 2011 and 2012 and its 2012 CDM savings in 2012.

- a) Please expand Table 9.2.8 and include all the appropriate OPA CDM Initiatives that produced net CDM savings which were used in NOTL's LRAMVA calculations. For each rate class, please list all relevant CDM initiatives and provide the subsequent net CDM savings for each. An example is provided below:

Residential	Net kWh	Net kW
Initiative 1		
Initiative 2		
Initiative 3		
Total		
GS<50	Net kWh	Net kW
Initiative 1		
Initiative 2		
Initiative 3		
Total		
GS>50	Net kWh	Net kW
Initiative 1		
Initiative 2		
Initiative 3		
Total		